

# Influenza Testing

## Consider Testing for Influenza:

1. When patients with symptoms consistent with influenza present anytime between May and October (the influenza “off-season”)
2. When influenza is not widespread in the community
3. When a patient is sicker than normal (i.e. hospitalized)
4. When a patient is a health-care worker with direct patient contact
5. When a patient has had recent travel to Asia (within 10 days of illness onset)

Testing should be undertaken early in the course of the illness (within 3 days of onset).<sup>1</sup>

## Which Test Should Be Ordered:

- Culture or PCR – Culture (preferably) or PCR should be performed:
  - During the “off-season”,
  - When patients are hospitalized,
  - On patients with recent travel to Asia.

In these cases, culture is able to differentiate strains of influenza and can alert the medical community to the possibility of unusual strains. Culture sensitivity can vary depending upon the lab, but the specificity is excellent.

- Direct Fluorescent Antibody (DFA) – DFA can be performed at any time. While not as rapid as the newer tests, DFA is faster than traditional culture, with good sensitivity and specificity.
- Rapid Tests – There are several manufacturers of rapid influenza test kits. They are reasonable to use during times of known influenza activity in order to help direct the use of antiviral agents. Because their sensitivity

and specificity may be lower than culture, PCR, or DFA, they are less desirable to use during the “off-season”.<sup>1</sup>

- Antibody Tests – There is no real use of influenza antibody testing for patient management or public health surveillance.

### **Which Specimen to Collect:**

Always check with your laboratory to see which specimens are appropriate for the test method they employ. Generally, nasopharyngeal aspirates, washes, or swabs are considered to be acceptable specimens.<sup>1</sup>

<sup>1</sup>P.R. Murray et.al., Manual of Clinical Microbiology (8<sup>th</sup> Ed), ASM Press, 2003

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